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ABSTRACT

An electronic control that monitors the switching means used to operate transducers to detect conditions that can cause improper transducer operation. In the application the unenergized state of the transducer is always safe. Should a switch in the transducer circuitry be in an erroneous state, the control uses another switch to prevent improper operation of the transducer without requiring the involvement of the operator. Monitoring enables the control to prevent transducer operation before failures allow hazardous operation. Any switching means, activated by the control, an override, or both may be monitored as long as its intended state is known to the control. The control can also open the transducer circuitry when an externally controlled switch in the transducer circuitry changes state at a destructive rate.